



> The literature I have read also refers to the satellites transmitting  
> higher-resolution images in digital format.  
>  
> Does anyone know where I can find out more about the digital format and  
> frequencies used?  
>  
> Thanx  
>  
> --  
>  
> -----  
> Roland Besserer                      QUAD Systems, Santa Cruz                      roland@quadsys.com

There are several digital formats from the various satellites. Here's a summary of bit rate and resolution from active satellite series:

Satellite	Type	Digital Mode	Resolution	Bit rate
GOES	geostationary	VAS	.8 km per pixel	2.11 Mbit/sec
NOAA	polar orbiter	HRPT	1.1 km per pixel	667 Kbit/sec
METEOSAT	geostationary	PDUS	4 km per pixel	166 Kbit/second

The digital format in general yields higher resolution than the analog. The analog, by the way, is derived from the digital data stream on all these satellites. NOAA in the US and ESSA in Europe publishes technical manuals on the data formats. From an amateur perspective, WeatherSat Ink, 4821 Jessie DR, Apex, NC 27502 is a non profit quarterly journal that has covered building receiving equipment and data formats for both NOAA and GOES birds. The current issue (Second Quarter 1993) published March 20, 1993 has an HRPT data simulator project for testing the HRPT PC card published in the first quarter 1993 issue. (WeatherSat Ink is \$15 per year, \$5 for sample copy.). We plan to do PDUS in WeatherSat Ink later this year. In addition, Spec Com journal next issue is supposed to run an overview of the HRPT digital data stream that I authored.

Hope that helps,  
Tom Glembocki, K04BD              clouds@vnet.ibm.com

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Date: Mon, 22 Mar 1993 13:44:35 GMT  
From: news.uiowa.edu!alchemy.uhl.uiowa.edu!jstroppe@uunet.uu.net  
Subject: 144 MHz 4CX1000A Amplifier Design Needed  
To: info-hams@ucsd.edu

Mike: The E-Mail I try to send you comes back with Host Unknown. Your E-mail gets to me but I can not get back. Get me your address or we can move this over to the swap group. Have copied the info

and will regular mail it. There have been some other inquires. SO  
let me know. 73 john WA0VYZ

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Date: Mon, 22 Mar 1993 14:31:31 GMT  
From: sdd.hp.com!nigel.msen.com!fmsrl7!ef2007!ef5003!www@network.UCSD.EDU  
Subject: Experiences with Cushcraft R7 vertical??  
To: info-hams@ucsd.edu

I'm seriously thinking about getting a Cushcraft R7 vertical to replace  
my old Butternut HF-6V that came down hard last Fall (with a little help  
from the guys putting on my new roof :-( )

I liked the HF-6 but I'd like to add 12 & 17-meter coverage (since my  
KWM-2A has all the WARC bands). The end-fed half-wave design of the R7  
intrigues me too. If I put it up in the same place, it will be up on my  
roof attached to the chimney and other supports, but with a minimal  
radial system at most. The R7 CLAIMS to not need extensive radials  
because of the half-wave design.

Anyone have any SPECIFIC experience WITH THE R7 that they'd care to  
share? (as opposed to general theoretical discussions of verticals vs  
whatever).

Tnx es 73 de WA8TZG

--  
Bill Meahan |EFHD Information Systems Staff  
Plant Floor Systems Specialist |Ford Motor Company  
www@ef5003.efhd.ford.com | +1 313 487 6122  
...!fmsrl7!pmsmam!www |I'm not paid to speak for Ford!

-----  
Date: 22 Mar 93 09:30:22 CST  
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net  
Subject: I passed! (General + 20wpm)!  
To: info-hams@ucsd.edu

Yes, I did something for my country this weekend!

Many thanks to all those who helped by offering encouragement, test  
taking tips, and explanations of technical points.

I went in Saturday to take my first amateur radio exam. I got off to  
a good start by passing 20 wpm. (1C) I went on to pass elements

2, 3A, and 3B. I passed all these quite nicely with less than 2 misses per test. (I missed 3/10 on the code test.) I came out ecstatic! When I went in I was worried that I would not be able to pass 13 wpm, and I came off with 20! My strategy was to catch every other letter. Write a letter, let one go, write the next, etc. Sometimes I could get 3 or 4 in a row. When I was done I had a bunch of letters I couldn't read, but I was able to pick up a few clues that helped me answer the questions.

I then took element 4A, but I had not prepared for that one at all and I did not pass it. Well I have some time now to bone up on 4A and 4B. I'm sure I will be able to pass them off before my licence ever gets here.

(While I'm waiting for the upgrade, I still probably won't have a radio, but I can at least start saving. ;^)

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--David C. Adams Statistician Cray Research Inc. dadams@cray.com

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Old Sourdoughs never die. They just ferment away.

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Date: Mon, 22 Mar 1993 15:48:30 GMT  
From: infonode!ingr!b30news!bptatro@uunet.uu.net  
Subject: Logging Software  
To: info-hams@ucsd.edu

Hi everybody,

I am looking for some good logging software, but so far haven't found any out on the netland. Does anybody know where or if there is any available. So far, I haven't found any. I am currently writing a logging program, but would like to have the input from you folks. Could you tell me what is needed, such as the different finput fields and othere enhancements you would like. I have a windows version that I am testing out, but would like to see what else is desired. Any and all input is welcome. Just drop me some email.

Thanks a lot!

PS: This is for my Dad (KC4DVT) for his birthday.

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email: brian@trans2.b30.ingr.com)

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Date: 22 Mar 93 16:04:18 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Matching antennas to low-cost receivers?  
To: info-hams@ucsd.edu

Zack Lau KH6CP/1 says:-

>Oops, wasn't really too clear on what I meant. I was  
>referring to improvements in receiver sensitivity, as  
>opposed to how much noise comes out of the speaker.  
Yes, if you just want more noise to come out of the  
>speaker, a tuner helps a mismatched antenna. I guess  
>I'm too used to receivers with lots of audio. Even the  
>transceiver I built during FD drives a pair of headphones  
>quite well. After all, I planned to use it 70 ft from a busy road.  
>  
>Another experiment to try: peak up your preselector/tuner  
>on a \*weak\* signal on 10 meters or some other relatively quiet  
>band. Next, find a strong signal and see if the peak for  
>max S-meter reading is different.  
>  
>If they are the same, great. But if they aren't, maybe you should  
>do your peaking on weak, rather than strong signals.  
>  
>Zack Lau KH6CP/1

I agree; the point of maximum signal-strength is not necessarily the  
point of maximum Signal-to-noise ratio. A classic example of this is on  
40 meters; if you peak for maximum signal-strength you may find that much  
of the cr\*p coming from the speaker is in fact crossmodulation  
products from broadcast-band stations.

And particularly at UHF and microwaves, the trick is to tune your preamp  
or whatever for best SNR, not necessarily the strongest S-meter reading.

One useful trick here is to get a noise-generator (forward-biased thermionic  
diode with filament-emission-limited current) and arrange some method to  
switch it between the RX input and a dummyload, very rapidly (say 800Hz).

This will generate a tone at the receiver output. The loudness of the tone  
depends on the receiver's signal-to-noise ratio. Tune for the loudest  
tone, not necessarily the highest S-meter reading.

-Pete Lucas G6WBJ PJML%swmis.nsw.ac.uk@nsfnet-relay.ac.uk  
pjml@uk.ac.nsw.swmis

High taxation is the sign of an uncivilised country, or a gullible electorate.

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Date: Mon, 22 Mar 1993 14:09:22 GMT  
From: pipex!bnr.co.uk!bmdhh130!bcars267!mwandel@uunet.uu.net  
Subject: N.A. 5.000MHz Time Signal - not WWV - what is it?  
To: info-hams@ucsd.edu

In article <Xkwo1B3w165w@inqmind.bison.mb.ca> bills@inqmind.bison.mb.ca (Bill Shymanski) writes:

>mwandel@bnr.ca (Markus Wandel) writes:

><deletions about unknown 5.0 MHZ standard time station>

>>

>> While I'm on this topic... sometimes when the propagation is good  
>> it is possible to hear both WWV and WWVH together (usually on 10MHz  
>> or 15MHz with my setup). How come the carrier frequencies of the  
>> two stations do not interfere with each other? Suppose you are

>>

>> Markus Wandel

>> markus@pinetree.org <-- NOT the source of this posting.

>>

>

>Consider that standard time stations have to add the occasional  
>second per year to compensate for the Earth's slowing rate of  
>rotation, and consider that everything at WWV is locked to the  
>bank of atomic clocks. This implies that WWV's transmitted frequency  
>is good to something like 50 parts per billion - as is WWVH's.  
>So, the maximum beat frequency you'd expect to get between the  
>two stations would be something like .25 HZ at 5 MHZ - which would  
>be indistinguishable from propagation effects. And, very likely,  
>both stations really are on the same frequency most of the time -  
>thus eliminating the beat.

Let me clarify that. Suppose the stations are at EXACTLY the same frequency and phase locked together. Suppose you are somewhere inbetween where the signal strength from the two stations is approximately equal and the carrier frequencies arrive exactly 90 degrees out of phase all the time. This would eliminate the carrier frequency, leaving just parts of the sidebands and giving unlistenable audio. Now suppose the stations are not exactly phase locked or (more realistically) that the propagation path between the stations and you is constantly shifting in length. This would constantly vary the phase of the two carriers with respect to each other and cause the audio to fade between clear and distorted in the same way that it does for selective carrier fading, only worse. Well, does it?

By the way you can hear a 0.25Hz beat note just fine. I sometimes use the BFO and product detector in my receiver for AM detection instead of the regular envelope detector. With very careful tuning of the

BFO I can get exactly zero beat and then it produces better audio than the envelope detector. But it does drift and then the audio wafts in and out most unpleasantly at the beat frequency. That's what it sounds like.

Markus Wandel  
markus@pinetree.org <-- NOT the source of this posting

-----  
Date: Mon, 22 Mar 1993 14:54:27 GMT  
From: spooky!witr@uunet.uu.net  
Subject: Nicad Memory Effect-Fact or Myth?  
To: info-hams@ucsd.edu

In article <1993Mar21.155108.22371@ke4zv.uucp>, gary@ke4zv.uucp (Gary Coffman) writes:

| Now on the other hand, you run the risk of \*reversing\* a cell  
| if you overly discharge a pack, so the dischargers you see on  
| the market are dangerous tools that must be used with extreme  
| care.

Is this what happens if you leave a NiCad battery to self discharge for a long period of time, say 6 months? I have several of these that have only about 10 cycles, but were left in a box for about a year (in a discharged state). Now the 1 hour batteries last about 3 minutes before the equipment shuts down.

If I dissassemble the batterys, how can I tell which cells are ``reversed''?

Should I replace the ``reversed'' cells, or do something to them?

--

Robert Withrow, Tel: +1 617 598 4480, Fax: +1 617 598 4430, Net: witr@rwwa.COM  
R.W. Withrow Associates, 21 Railroad Ave, Swampscott MA 01907-1821 USA

-----  
Date: Mon, 22 Mar 1993 16:59:32 GMT  
From: netcomsv!netcom.com!jfh@decwrl.dec.com  
Subject: past postings about Yaesu ft-530?  
To: info-hams@ucsd.edu

I recently purchased a Yaesu FT-530 2m/440 HT. It seems to have a slightly fried CPU or something. It occasionally goes into strange modes where it can't receive 2m, or the buttons don't work as they're supposed to. If I reset the CPU, everything works again for a while (but the reset erases all the memory).

I understand that there were some postings about this a while back. Can someone tell me how to locate them, or summarize them for me?

--

-----  
Jack Hamilton    jfh@netcom.com    P. O. Box 281107    SF, CA    94128-1107  
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Date: Mon, 22 Mar 1993 16:25:05 GMT  
From: usc!howland.reston.ans.net!gatech!concert!fletcher!etowah.cs.unca.edu!  
sampson@network.UCSD.EDU  
Subject: Real NoCodes  
To: info-hams@ucsd.edu

I for one agree with Buddys comments on this subject. I too am a 23 yr old Extra Class who is an avid CW op and packeteer. I share Buddys experiences of being against the no-code liscense at first but now have found many no-code fellow hams to be great friends and good ops. At a young age of 13 I found hams in this area to be extremely courteous, friendly, and helpful. Never once did one criticize continually on mute points. If a mistake was made, someone may point it out but in a courteous manner.

Please drop this subject as it was hounded to death in earlier postings and remember that ole saying ye momma said..." If you cant say anything nice... just keep your mouth shut!" Thankyou and vry 73.

Daryl Sampson KM4GO  
CW OP/ Volunteer Examiner WCARS/VEC

-----  
Date: Mon, 22 Mar 1993 16:10:29 GMT  
From: usc!howland.reston.ans.net!gatech!concert!rock!cole@network.UCSD.EDU  
Subject: Real NoCodes  
To: info-hams@ucsd.edu

In article <1993Mar20.183158.28509@bongo.tele.com> julian@bongo.tele.com (Julian Macassey) writes:

>In article <1993Mar20.024756.22555@anomaly.sbs.com> ka1ftw@anomaly.sbs.com writes:

>>

>[stuff deleted]

>>

>>5. Says "Break" to Make a Call. (break means you have emergency

>> traffic in ham radio !!!!! )



>  
>[stuff deleted]  
>  
> And "Break" means emergency traffic in ham radio? Where does  
>it mean that? In most parts of the world I travel in it means "Would  
>the geezers stop jabbing for a while so I can make a call."

Calling "break" or "break break" to interrupt a conversation (note lack of  
Q signal) \_implies\_ emergency traffic, and would the active stations please  
stand by.

This implication is taken from the ARRL-sanctioned Technician study guide  
(blue book) in the "Repeater Use" section(s), and I believe it is mentioned  
elsewhere (i.e., other license guides).

If this were a perfect world, an example of an acceptable use of "break break"  
would be to access the autopatch to report an accident or other life-  
threatening situation.

To join a conversation in progress, give your call sign between pauses (if  
possible. Sometimes people are just a little too quick on the PTT. It  
bothers me, too).

Lighten up.

73 de KC4WEJ,  
Derrick

--  
"What're you going to do? Shoot me?"  
-- American press reporter to US Marine

-----  
Derrick Cole                      KC4WEJ                      MCNC Center for Communications

-----  
Date: 22 Mar 93 16:23:59 GMT  
From: usc!cs.utexas.edu!uwm.edu!logicse!henson!news.u.washington.edu!ns1.nodak.edu!  
plains!ndsuvvm1!ud033289@network.UCSD.EDU  
Subject: Real NoCodes  
To: info-hams@ucsd.edu

I agree. We also have no problem. It's a poor way to get get those no-codes  
to upgrade. By the way have you been on 80 meters during a contest.. Some of  
it sounds like 11 Meters, but all in all it's really only a few...and none  
of these lids are no codes.

Bob KA0CLH (Extra)

-----  
Date: Mon, 22 Mar 1993 14:49:28 GMT  
From: sdd.hp.com!col.hp.com!fc.hp.com!jayk@network.UCSD.EDU  
Subject: source for spools of wire  
To: info-hams@ucsd.edu

(I wrote)

>>Standard electric fence wire is not good wire to use for transmitting. I  
>>think if you use it for xmit you will find the SWR of the antenna varies  
>>wildly with different power levels. I agree with the earlier suggestion  
>>of using copperweld.

>>

>>Electric fence wire works well for receiving (I have 4 beverages made  
>>out of it). I have a support every 150 feet or so and have a little sag  
>>in the wire.

>>

>>73, Jay Kesterson K0GU                    jayk@fc.hp.com

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(K9ERG wrote)

>Try contacting your local FARM supply store... They carry Electric fence  
>wire that is GREAT for long-wire antennae, Rhombics, etc.

>

>It usually comes on 1/4, 1/2, and 1 mile spools. This stuff used to be  
>copper-weld, but most of the new stuff is galvanized. The Ohmic losses  
>will be slightly greater than copper-weld, but it still works quite well.

>

>GL, 73, etc.            Paul    --    K9ERG

-----  
Have you used electric fence wire for transmitting?? My one experience  
with it was as the horizontal part of a 160 meter inverted L. I tuned  
the antenna to a low SWR with about 10 watts. At about 100 watts the  
SWR had gone up to 2.5:1. When I turned on the amplifier the SWR was  
so bad I couldn't get the amp to tune properly.

Sometime after that I spoke with a friend who had done some tests  
with electric fence wire on a spectrum analyzer. He said the RF current  
capability was so bad he wouldn't recommend even using it for radials  
in a system with lots of radials.

I visited about six farm supply stores in this area. All the electric fence  
wire I saw is galvanized or silver in color. I don't think you will find  
any copper in it. If you get lucky, sometime you can still find a roll of  
aluminum #17 electric fence wire at about twice the cost of the regular  
wire. Good radial stuff but doesn't have the strength for long unsupported  
runs.

Anybody else have experience with this stuff??

73, Jay K0GU

jayk@fc.hp.com

-----  
Date: Mon, 22 Mar 1993 15:44:32 GMT

From: swrinde!sdd.hp.com!saimiri.primate.wisc.edu!caen!uwm.edu!linac!att!cbnews!jeffj@network.UCSD.EDU

To: info-hams@ucsd.edu

References <1993Mar20.024756.22555@anomaly.sbs.com>,  
<C47317.L1u@athena.cs.uga.edu>, <C473AM.LDJ@athena.cs.uga.edu>  
Subject : Re: Real NoCodes

In article <C473AM.LDJ@athena.cs.uga.edu> mcovingt@aisun3.ai.uga.edu (Michael Covington) writes:

>Re the posting blaming "NoCodes" for all sorts of misbehavior:

>

>(1) We have \_no\_ problem with misbehavior of "NoCodes" around here.

>There many fine hams who hold codeless Technician licenses.

>

>(2) If you are describing a real problem, it needs to be dealt with

>by means other than just insulting a class of licensees.

>

>If you are just flaming, we don't need your flames. Your goal seems

>to be to spread prejudice against a particular license class the way

>other people spread prejudice against ethnic groups.

I am SO TIRED OF THIS CRUD I COULD SCREAM! Once again, a narrow minded ham has put on his blinders and has stated skewed facts to support his position. He has for some reason ignored all the hams that jammed repeaters before the Nocodes showed up. He has also failed to mention all the other hams who took exception to having their operating habits corrected on the repeater and on the other bands. A lot of the grunge work at our ham radio club is done by Nocode techs. As you get more people into ham radio you are going to have more problems, that is a fact of life. However in addition to that you are going to have a much bigger market which translates out to more and more products and services available to us as a whole. I don't like CBisms on the repeater, in fact I can't stand them! Every time without exception when I have helped someone with their operating habits on the local repeater they have been gracious about it. To focus on one particular subset of the ham community and state that they are basically the scum of the earth is at best a exerise of Garbage In, Garbage Out logic and at worst showing your total ignorance and prejudice. Go back and work on your facts abit, take your blinders off and try to think clearly. You'll find that the facts don't support your position. You have taken a extremely small sample and used it to extrapolate for the entire nation. This is not good.

Jeff

--

Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!  
jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.  
Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?

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Date: Mon, 22 Mar 1993 13:48:29 GMT  
From: pipex!bnr.co.uk!bmdhh130!bcars267!mwandel@uunet.uu.net  
To: info-hams@ucsd.edu

References <C46D7s.I0z@news.Hawaii.Edu>, <C46qLE.nM@news.Hawaii.Edu>,  
<1993Mar20.152143.16750@netcom.com>et  
Subject : Re: N.A. 5.000MHz Time Signal - not WWV - what is it?

In article <1993Mar20.152143.16750@netcom.com> crisp@netcom.com (Richard Crisp) writes:

>

>Here in Silicon Valley, Ca. we get WWV, WWVH, JJY, BPM, and VNG in the morning  
>greyline on 5mhz. At 28 past the hour it is a really amusing pile up. If the  
>gentleman from Canada could also include the approximate time of day of his  
>logging it would make it much easier to accurately identify which of the many  
>possible time stations he heard.

The Gentleman from Canada has since determined that it was the Caracas, Venezuela station, thanks to the net. I couldn't have understood the Spanish announcement but it was easy to match it to the written copy someone sent me.

I've heard this station every evening recently, any time after dark. Pretty amazing that this measly 1KW transmitter so far away could come in stronger than the WWV which is much closer and (I assume) much more powerful.

I haven't heard any of the other offshore time stations that were described.

Markus Wandel  
markus@pinetree.org <-- NOT the source of this posting

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Date: Mon, 22 Mar 1993 14:58:30 GMT  
From: ddsww1!chinet!megabyte@uunet.uu.net  
To: info-hams@ucsd.edu

References <1993Mar20.024756.22555@anomaly.sbs.com>,  
<C47317.L1u@athena.cs.uga.edu>, <C473AM.LDJ@athena.cs.uga.edu>  
Subject : Re: Real NoCodes

mcovingt@aisun3.ai.uga.edu (Michael Covington) writes:

>(1) We have \_no\_ problem with misbehavior of "NoCodes" around here.

>There many fine hams who hold codeless Technician licenses.

Ditto here in the Shenanadoah Valley of Virginia. In fact, our most active and effective AREAS members are techs.

Me? tech+

--

"It is a pity that even a single drop of this noble  
gift of God should be spilled" - J.S. Bach on wine

Mark E. Sunderlin: Technocrat in Winchester, Virginia KD4HRI  
aka Dr. Megabyte: megabyte@chinet.chi.il.us (703) 722-9330

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End of Info-Hams Digest V93 #360

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